

## ABSTRACT OF THE DISCLOSURE

A liquid crystal display device with low power consumption is provided by using a driver circuit and a pixel that have novel circuit structures. In a liquid crystal display device using  $n$  ( $n$  is a natural number and satisfies  $n \geq 2$ ) bit digital video signals to display an image,  $n \times m$  ( $m$  is a natural number) memory circuits and  $n \times k$  ( $k$  is a natural number) non-volatile memory circuits are provided in each pixel, thereby giving the device a function of storing  $m$  frames of digital video signals in the memory circuits and a function of storing  $k$  frames of digital video signals in the non-volatile memory circuits. Once stored in the memory circuits, the digital video signals are repeatedly read out for every new frame to display a still image, so that driving of a source signal line driver circuit can be stopped during still image display. Moreover, digital video signals stored in the non-volatile memory circuits are kept stored after power supply is shut off and hence the image of the stored data can immediately be displayed next time the display device is turned on.